

All,

Here are three resources relating to FHWA's support for design flexibility. Let me know if specific questions or design scenarios have come up in your discussion as I'm happy to provide additional or more targeted resources or background information as needed.

FHWA Bicycle and Pedestrian Facility Design Flexibility Memorandum: This memorandum expresses the Federal Highway Administration's (FHWA) support for taking a flexible approach to bicycle and pedestrian facility design. The American Association of State Highway and Transportation Officials (AASHTO) bicycle and pedestrian design guides are the primary national resources for planning, designing, and operating bicycle and pedestrian facilities. The National Association of City Transportation Officials (NACTO) [Urban Bikeway Design Guide](#) and the Institute of Transportation Engineers (ITE) [Designing Urban Walkable Thoroughfares](#) guide builds upon the flexibilities provided in the AASHTO guides, which can help communities plan and design safe and convenient facilities for pedestrian and bicyclists. FHWA supports the use of these resources to further develop nonmotorized transportation networks, particularly in urban areas.

- Also note that FHWA supports the use of the NACTO Urban Street Design Guide, per: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_flexibility_qa.cfm

Bicycle and Pedestrian Funding, Design, and Environmental Review: Addressing Common Misconceptions: This document addresses common misconceptions and distinguishes between Federal standards and State and local practice. Where possible, links identify resources that provide more detail on the topic. It focuses on three policy areas: Funding, Design, and Environmental Review.

- Note that this includes the statement: "There is no minimum lane width requirement to be eligible for Federal funding."

Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts: On August 22, FHWA published a new planning and design resource, *Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts*. The report will help practitioners address topics such as intersection design, road diets, pedestrian crossing treatments, transit and school access, freight, and accessibility. It highlights ways to apply design flexibility, while focusing on reducing multimodal conflicts and achieving connected networks. Design Topics are listed below:

Part 1: Applying Design Flexibility

- Design Criteria and Lane Width – flexibility in the selection of design criteria, including vehicular lane width.
- Intersection Geometry – flexibility in design-vehicle selection and the tolerance for vehicle encroachment; and best practices to create compact intersections.
- Traffic Calming and Design Speed – common misconceptions in traffic calming and the selection of design speed.
- Transitions to Main Streets – flexibility in creating a context-sensitive street design where a rural highway travels through a small town.
- Road Diets and Traffic Analysis – flexibility in volume thresholds, level of service thresholds, assumptions for traffic projections, and traffic analysis
- Enhanced Crossing Treatments – flexibility in marking a crosswalk, completing a warrant study for beacons and traffic signals, and applying additional crossing treatments.
- Signalized Intersections – flexibility in intersection design to safely accommodate bicyclists and pedestrians.

- Paved Shoulders – flexibility in the use and purpose of shoulders, paving shoulders as part of various project types, and the design and placement of rumble strips.
- Separated Bike Lanes – flexibility in the design of separated bike lanes.
- Bus Stops – flexibility in bus stop design and best practices for placement.
- Bridge Design – flexibility in bridge design to accommodate pedestrians and bicyclists across the structure and to provide access to the structure from under-passing trails.
- Slow Streets – flexibility in designing streets for speeds lower than 20 mi/h.

Part 2: Reducing Conflicts

- Network Connectivity – strategies to develop safe and comfortable pedestrian and bicycle networks.
- School Access – strategies to provide safe access to schools by maximizing the safety of walking and bicycling, minimizing motor vehicle trips, and reducing on-site circulation conflicts.
- Multimodal Access to Existing Transit Stations – strategies to retrofit transit stations to improve access for pedestrians and bicyclists.
- Multimodal Access to New Transit Stations – strategies to reduce conflicts between various modes through transit station site planning and layout.
- Transit Conflicts – strategies to reduce conflicts between transit vehicles, motorists, pedestrians, and bicyclists in various scenarios.
- Freight Interaction – strategies to reduce conflicts between freight vehicles, loading activities, pedestrians, and bicyclists.
- Accessibility – strategies to provide an accessible pedestrian network for people with disabilities.
- Turning Vehicles – strategies to reduce conflicts between pedestrians, bicyclists, and right- and left-turning vehicles at intersections.
- Separated Bike Lanes at Intersections – strategies to reduce conflicts at intersections with protected intersections and mixing zones.
- Shared Use Paths – strategies to determine shared use path width and when separation of modes is necessary.
- Midblock Path Intersections – strategies to reduce conflicts at shared use path and roadway intersections.
- Shared Streets – strategies to design shared streets for all users and information on when shared streets are appropriate.

Thanks!

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